Proposed diesel PM control measure for publicly-owned fleets

Section 2020 Purpose and Definitions for Diesel Particulate Control Measures

The following new definitions are proposed:

"Municipal active fleet" means the total of municipal fleet vehicles owned by a municipality.

"Municipal fleet vehicle" means an on-road heavy-duty vehicle with a manufacturer's gross vehicle weight rating of greater than 14,000 pounds, owned, leased, and/or operated on public roads by a municipality.

The following new section is proposed:

Section 2022 Diesel Particulate Matter Control Measure for Publicly-Owned On-road Heavy-duty Diesel-fueled Vehicles

(a) **Scope and Applicability**. This regulation applies to a municipality that owns, leases, or operates an on-road diesel-fueled heavy-duty vehicle with a manufacturer's gross vehicle weight rating greater than 14,000 pounds and a 1960 to 2006 model year engine, but not including a solid waste collection vehicle or school bus. This section does not apply to a transit agency.¹

Section 2022.1 Requirements Applicable to a Municipality.

- (a) **Compliance Requirements**. As of the applicable effective dates, a municipality is required to comply with this diesel particulate matter control measure for each vehicle in its municipal active fleet. Compliance requires:
 - (1) Use of a best available control technology for each vehicle as specified in paragraph (b),
 - (2) Implementation for each vehicle as specified in paragraph (c),
 - (3) Use of appropriate fuel for each vehicle as specified in paragraph (d), and
 - (4) If a compliance deadline extension is granted by the Executive Officer per paragraph (e), the owner shall be deemed to be in compliance as specified by authorization from the Executive Officer.
 - (5) Recordkeeping as specified in section 2022.2.

¹ For rules applying to solid waste collection vehicle owners, see section 2021. For rules applying to transit agencies, see section 2023.

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- (6) Continuous Compliance. Once a vehicle is in compliance with this regulation it must remain in compliance for the life of the vehicle while it is operated in California.
- (b) **Best Available Control Technology**. Each municipality shall use one of the following best available control technologies on each engine in the municipal active fleet as required by the implementation schedule in paragraph (c):
 - (1) An engine or power system certified to the optional 0.01 g/bhp-hr particulate emission standard as specified in title 13, California Code of Regulations, section 1956.8(a)(2), or the 0.01 g/bhp-hr particulate emission standard as specified in title 13, California Code of Regulations, section 1956.8(a), when effective; or
 - (2) An alternative fuel, or a heavy-duty pilot ignition engine. Model year 2004 2006 engines must be certified to the optional, reduced emission standards as specified in title 13, California Code of Regulations, section 1956.8 (a)(2)(A); or
 - (3) The highest level diesel emission control strategy per title 13, California Code of Regulations, section 2702 (f), Table 1, that is verified for a specific engine to reduce diesel particulate matter and for which the diesel emission control strategy manufacturer or authorized dealer agrees can be used on a specific engine and vehicle combination, without jeopardizing the original engine warranty in effect at the time of application; or
 - (4) An engine or power system certified to the 0.1 g/bhp-hr particulate emission standard as specified in title 13, California Code of Regulations, seciton 1956.8 used in conjunction with the highest level diesel emission control strategy as defined in subparagraph (3) applied by the applicable compliance deadline in paragraph (c).

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(c) Implementation Schedule.

(1) The municipality shall comply with the schedule in Table 1 - Implementation Schedule for a Municipal Active Fleet, for the specified percentage of vehicles by each applicable compliance deadline.

Table 1 – Implementation Schedule for a Municipal Active Fleet

Group	Engine Model Years	Percentage of Group to Use Best Available Control Technology	Compliance Deadline, as of December 31
1	1960 - 1987	20	2005
'	1900 - 1907	40	2006
		60	2007
		80	2008
		100	2009
2	1988 - 1993	20	2005
		40	2006
		60	2007
		80	2008
		100	2009
3	1994 - 2002	20	2005
		40	2006
		60	2007
		80	2008
		100	2009
4	2003 – 2006	50	2009
		100	2010

- (2) Calculating Percentages for Implementation based on Municipal Active Fleet Size. The municipality shall calculate the size of its municipal active fleet on January 1st of each year based on the model year of each engine as of January 1st. In the 100% compliance year for each group, the municipality shall ensure that all vehicles comply by December 31st, including any engines added to that group after January 1st.
 - (A) The total number of vehicles required to be in compliance by the "Compliance Deadline" (TotVeh) is calculated by multiplying "Percentage of Group to Use Best Available Control Technology" (Group%BACT) for that year by the sum of the number of vehicles in an engine model year tier (#) as in this following expression:

TotVeh = Group%BACT * (#)

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(B) The total number of vehicles in brought into compliance through the method described in paragraph (b)(3) (TotRetrofit) may be subtracted from TotVeh to determine the total number of additional vehicles required to be brought into compliance (TotAddComp) before the next compliance deadline as in the following expression:

TotAddComp = TotVeh - TotRetrofit

- (C) If the TotVeh or TotAddComp is not equal to a whole number of vehicles, the municipality may round up to the nearest vehicle when the fractional part is greater than or equal to one-half of a vehicle, and round down to the nearest vehicle when the fractional part is less than one-half of a vehicle.
- (d) Fuel Requirement. As of July 1, 2005, a municipality shall use diesel fuel with a sulfur content of 15 parts per million by weight or less for diesel vehicles in its municipal active fleet. A fuel that is verified by the Executive Officer as a diesel emission control strategy in accordance with title 13, California Code of Regulations, sections 2700 et seq., may be used instead of diesel fuel with a sulfur content of 15 parts per million by weight or less. A municipality with fewer than fifteen vehicles in its municipal active fleet, and that operates in a federal one-hour ozone attainment area, is not subject to this low-sulfur fuel requirement until July 1, 2006.
- (e) **Compliance Extensions**. A municipality may receive an extension in compliance under the following circumstances:
 - (1) No Verified Diesel Emission Control Strategy. If no diesel emission control strategy has been verified under title 13, California Code of Regulations, sections 2700 et seq., or is not commercially available for a particular engine and vehicle combination, an annual extension in compliance may be granted under the conditions specified in (A) or (B) below:
 - (A) Executive Officer Compliance Extension. The Executive Officer shall grant a blanket one-year compliance extension if a diesel emission control strategy is not verified for an engine ten months prior to each compliance deadline specified in paragraph (c)(1). The Executive Officer shall grant an annual extension until 2009, after which the municipality shall comply with paragraph (b) by December 31, 2010, except that for a Group 1 engine the Executive Officer will grant a one-time annual extension only;
 - (B) Municipality Application Compliance Extension. A municipality may apply to the Executive Officer for a compliance extension for one or more engines if a diesel emission control strategy is not verified or commercially available six months prior to each compliance deadline specified in paragraph (c)(1). The municipality must first apply best available control technology to all applicable engines as required before requesting an extension and shall provide documentation as follows:

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- (i) Identification of each engine by vehicle identification number, engine make and model, and vehicle type, for which no diesel emission control strategy has been verified, or
- (ii) Identification of each engine and vehicle combination, by vehicle identification number, engine make and model, and vehicle type, for which no diesel emission control strategy is commercially available and a list of manufacturers that have been contacted with their responses to a request to purchase.
- (iii) The municipality shall certify by signature that it is in compliance as required in paragraph (b) for all vehicles in its municipal active fleet.
- (iv) The application for compliance must be received by the Executive Officer no later than July 31st annually beginning 2005. The Executive Officer will accept an annual compliance extension application until July 31, 2009, after which the municipality shall comply with paragraph (b) by December 31, 2010, except for the following: the Executive Officer may grant a compliance extension for only one year for any engine in Group 1 and will accept an annual compliance extension application until July 31, 2011, for engines in Group 4, after which the municipality shall comply with paragraph (b) by December 31, 2012.
- (2) Fleet in Federal One-Hour Ozone Attainment Area. A municipality located within a federal one-hour ozone attainment area may delay implementation of the intermediate compliance deadlines provided the municipality complies with the 100% compliance deadlines.
- (f) **Diesel Emission Control Strategy Special Circumstances**. A municipality shall maintain best available control technology on each vehicle once that vehicle is in compliance, and is not required to upgrade to a higher level of best available control technology, except under the following special circumstances:
 - (1) Diesel Emission Control Strategy Failure or Damage. In the event of failure or damage of a diesel emission control strategy, the following conditions apply:
 - (A) Failure or Damage During Warranty Period. If a diesel emission control strategy fails or is damaged within its warranty period and the diesel emission control strategy manufacturer or authorized dealer determines it can not be repaired, the municipality shall replace the diesel emission control strategy with either the same level diesel emission control strategy or another best available control technology as defined in paragraph (b), or
 - (B) Failure or Damage Outside of Warranty Period. If a diesel emission control strategy fails or is damaged outside of its warranty period, and it cannot be repaired, the municipality shall install a diesel emission control

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- (C)Repairable Malfunction. If a diesel emission control strategy malfunctions but is repaired to proper operating specifications within a reasonable amount of time, a municipality is not required to replace that diesel emission control strategy with current best available control technology.
- (2) Discontinuation of Fuel Verified as a Diesel Emission Control Strategy. If another best available control technology is not commercially available within 30 days from the date of discontinuation of a fuel verified as a diesel emission control strategy, the municipality shall submit a compliance plan to the Executive Officer no later than 60 days after discontinuation that demonstrates compliance within six months.
- (3) Level 1 Diesel Emission Control Strategy. A Level 1 diesel emission control strategy may be used for a limited time as a best available control strategy.
 - (A) A municipality with fewer than 15 vehicles in its active fleet may only use a Level 1 diesel emission control strategy in a Group 1 engine for ten years, after which the municipality shall replace the Level 1 diesel emission control strategy with the best available control technology from subparagraph (b)(1), (b)(2), or (b)(4). A municipality with 15 or more active fleet vehicles may not use a Level 1 diesel emission control strategy in a Group 1 engine.
 - (B) A municipality may only use a Level 1 diesel emission control strategy in a Group 2 engine for ten years, after which the municipality shall replace the Level 1 diesel emission control strategy with the best available control technology from subparagraph (b)(1), (b)(2), or (b)(4).
 - (C)A municipality may only use a Level 1 diesel emission control strategy in a Group 3 engine for five years, after which the municipality shall replace the Level 1 diesel emission control strategy with the best available control technology from subparagraph (b) other than a Level 1 diesel emission control strategy.
 - (D)A municipality may only use a Level 1 diesel emission control strategy in a Group 4 engine for five years, after which the municipality shall replace the Level 1 diesel emission control strategy with the best available control technology from subparagraph (b) other than a Level 1 diesel emission control strategy.
- (4) Engine Retire Exemption. If a municipality determines that an engine will be retired within one year of its applicable 100% compliance deadline, the municipality is exempt from applying the best available control technology as defined in paragraph (b) to that engine, provided documentation of expected

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- (5) Use of Experimental Diesel Particulate Matter Emission Control Technologies. A municipality may use an experimental diesel particulate matter emission control strategy provided by or operated by the manufacturer in no more than ten vehicles in its municipal active fleet for testing and evaluation purposes. The vehicle will be considered to be in compliance for the length of the testing and evaluation period of the experimental technology on that vehicle. The municipality must bring the vehicle into compliance within six months of the end of the testing and evaluation period.
- (g) Non-Compliance. Any violations of this section may carry civil penalties as specified in state law and regulations, including, but not limited to, Health and Safety Code section 39674.

Section 2022.2 Record Keeping and Reporting.

- (a) As of December 31, 2005, a municipality shall comply with the following record keeping and reporting requirements for its municipal active fleet. The municipality shall provide the following records to an agent or employee of the Air Resources Board upon request for all vehicles in its municipal active fleet subject to compliance with this regulation.
 - (1) Records Accessible at Vehicle Location. The municipality shall keep the following records accessible either in hard copy format or computer records at the location where a vehicle normally resides when not working:
 - (A) A list by vehicle license or identification number of vehicles identifying each vehicle type, engine manufacturer, engine model, engine model year, and.
 - (B) Correlated to each vehicle, the installed diesel emission control strategy, its serial number, manufacturer, model, level, installation date, and if using a Level 1 or Level 2 verified diesel emission control strategy, justification for installation, and,
 - (C)Records of maintenance for each installed diesel emission control strategy, and,
 - (D) For fuel or fuel additives, if used as a diesel emission control strategy, records of purchase that document usage, and,
 - (E) For each engine for which a municipality is claiming an exemption pursuant to section 2022.1 (f)(4), the vehicle identification number, engine

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- (F) For each engine for which a municipality is claiming an exemption pursuant to section 2022.1 (f)(5), the vehicle identification number, engine manufacturer, engine model, engine model year, and documentation of the experimental program.
- (2) Records Kept in the Vehicle. For each vehicle, a municipality shall keep the following information affixed to the driver's side door jam, or another readily accessible location known by the driver of each vehicle, in the form of a legible and durable label:
 - (A) For each installed diesel emission control strategy, label information as specified in title 13, California Code of Regulations, section 2706 (g), and the installation date, or
 - (B) Engine model year and planned compliance date, or
 - (C) Engine model year and retirement date for which a municipality is claiming an exemption pursuant to section 2022.1 (f)(4).
 - (D) Engine model year and duration of experimental program for each vehicle for which a municipality is claiming an exemption pursuant to section 2022.1 (f)(5).
- (b) A municipality shall keep records for each vehicle it owns or operates until it is sold outside of the State of California or destroyed. If sold within the State of California, the municipality shall convey the required records to the next owner.
- (c) A municipality shall submit the records specified in (a)(1) to the Executive Officer upon request.
- (d) Non-Compliance. Any violations of this section may carry civil penalties as specified in state law and regulations, including, but not limited to, Health and Safety Code section 39674.